

SUB A1

1. A human cervical cancer 1 protooncogene having the base sequence of SEQ ID NO:1 or a fragment thereof.
2. The fragment of the protooncogene of claim 1 having a base sequence corresponding to base Nos. 9 to 1088 of SEQ ID NO:1.
3. A protein having the amino acid sequence of SEQ ID:2 or a fragment thereof.
4. A vector comprising the protooncogene or fragment of claim 1.
5. A microorganism transformed with the vector of claim 4.
6. The microorganism of claim 5, which is *E. coli* JM109/HCCR-1 (Accession No.: KCTC 0667BP).
7. A process for preparing the protein or fragment of claim 3 comprising culturing the microorganism of claim 5 or 6.
8. A kit for diagnosis of cancer which comprises the protooncogene or fragment of claim 1 or 2.
9. A kit for diagnosis of cancer which comprises the protein or fragment of claim 3.

10. An anti-sense gene having a base sequence which is complementary to the sequence of the full or partial mRNA transcribed from the protooncogene or fragment of claim 1 or 2 and being capable of binding the mRNA to inhibit the expression of said protooncogene or fragment.

5 9 11. The anti-sense gene of claim <sup>8</sup>10 having the base sequence of SEQ ID NO:3.

12. A process for treating or preventing cancer in human which comprises administering a therapeutically effective amount of the anti-sense gene of claim 10 or 11 to the human.

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ADD A4

SUB A2